1. Record Nr. UNINA9910795921203321 Autore Opperman Jeffrey J. **Titolo** Floodplains: Processes and Management for Ecosystem Services // Jeffrey J. Opperman, Peter B. Moyle, Eric W. Larsen, Joan L. Florsheim, Amber D. Manfree Pubbl/distr/stampa Berkeley, CA:,: University of California Press,, [2017] ©2017 **ISBN** 0-520-96632-5 Descrizione fisica 1 online resource (258 pages) Disciplina 333.91/7 Soggetti **Floodplains** Floodplains - California - Central Valley Floodplain ecology Floodplain management Earth (Planet) Surface Processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Front matter -- Contents -- Authors -- Acknowledgments -- 1. Nota di contenuto INTRODUCTION TO TEMPERATE FLOODPLAINS -- 2. HYDROLOGY -- 3. GEOMORPHOLOGY -- 4. BIOGEOCHEMISTRY -- 5. ECOLOGY: INTRODUCTION -- 6. FLOODPLAIN FORESTS -- 7. PRIMARY AND SECONDARY PRODUCTION -- 8. FISHES AND OTHER VERTEBRATES -- 9. ECOSYSTEM SERVICES AND FLOODPLAIN RECONCILIATION -- 10. FLOODPLAINS AS GREEN INFRASTRUCTURE -- 11. CASE STUDIES OF FLOODPLAIN MANAGEMENT AND RECONCILIATION -- 12. CENTRAL VALLEY FLOODPLAINS: INTRODUCTION AND HISTORY -- 13. CENTRAL VALLEY FLOODPLAINS TODAY -- 14. RECONCILING CENTRAL VALLEY FLOODPLAINS -- 15. CONCLUSIONS: MANAGING TEMPERATE FLOODPLAINS FOR MULTIPLE BENEFITS -- References -- Geospatial Data Sources -- Index Sommario/riassunto Floodplains provides an overview of floodplains and their management in temperate regions. It synthesizes decades of research on floodplain ecosystems, explaining hydrologic, geomorphic, and ecological

processes and how under appropriate management these processes

can provide benefits to society ranging from healthy fish populations to flood-risk reduction. Drawing on the framework of reconciliation ecology, the authors explore how new concepts for floodplain ecosystem restoration and management can increase these benefits. Additionally, they use case studies from California's Central Valley and other temperate regions to show how innovative management approaches are reshaping rivers and floodplains around the world.